

- 2 -

source of troublesome noise emissions. The type, dimensions and distribution of these transverse channels on the tread are therefore always a compromise between the various requirements.

5 In addition, the known tyres require periodic checks on the inflation pressure, which varies over a period of time as a result of the inevitable leakages, and the tyres also need to be replaced if they are punctured.

10 Finally, the known tyres determine the geometry of the rim, which must have a perimetric tubular portion which is free from apertures, in order to delimit the chamber for the pressurised fluid, and must permit fitting of the inflation valve. For these reasons, in  
15 the known solutions, the wheel/rim assembly has relatively high weights which generate inevitable forces of inertia, which, as is known, affect both the acceleration and the braking.

---

20 DISCLOSURE OF INVENTION

The object of the invention is thus to provide a tyre for vehicles which makes it possible to solve the above-described problems simply and economically, and in particular which makes it possible to obtain a high  
25 level of driving comfort in any condition in which it is used.

According to the present invention, a tyre is provided for vehicles, in particular for motor vehicles, which has an axis of symmetry and comprises a tread, two  
30 sidewalls, two beads which are attached to a wheel rim made of elastomer material, and at least one tubular reinforcement body which is coaxial to the said axis, is

**BEST AVAILABLE COPY**

- 3 -

surrounded by the said tread, and extends between the said sidewalls; each of the said sidewalls comprising a respective resilient annular membrane with a straight generatrix which forms an angle other than  $90^\circ$  with the axis of the tyre; characterised in that the said tubular reinforcement body comprises an annular belt and a plurality of blocks which are supported by the said annular belt in positions which are adjacent to one another, and can be forced against one another in order to apply resistance to the circumferential actions of compression which are present on the tyre during rotation of the tyre itself.

Preferably, in the above-defined tyre, the said tubular body has a dimension, measured parallel to the said axis, which is substantially the same as that of the tread measured in the same direction. Also preferably, the said membranes are stretched between the said tread and the said beads, such as to be pre-tensioned in the absence of loads on the tyre.

Also preferably, the generatrices of the said membranes converge towards one another such as to meet at a point outside the tread. Alternatively, the generatrices of the said membranes converge towards one another such as to meet at a point inside the tyre.

25

#### BRIEF DESCRIPTION OF THE DRAWINGS

The invention will now be described with reference to the attached figures, which illustrate some non-limiting embodiments of it, in which:

figure 1 illustrates in front elevation a preferred embodiment of a tyre produced according to the dictates of the present invention;